

In 1904 (Trans. Zool. Soc. xvii. pt. 3) I arranged the genera in five subfamilies; these may be grouped as follows:—

I. Pharyngeals toothless; hæmal spines not bifid; supra-cleithral plate extending downwards, its inner surface attached to the outer edge of the cleithrum, but not forming a definite articulation with it; body usually armoured; inner edge of metapterygoid attached to lateral ethmoid; hypocoracoids interlocking.

Plecostominae, Hypoptopomatinae.

II. Lower and fourth upper pharyngeals toothed; anterior hæmal spines bifid for reception of anal basalia; supra-cleithral plate scarcely decurved, its lower surface with a transverse ridge fitting a groove on the upper edge of the supra-cleithral expansion external to the head of the bone.

Body armoured; metapterygoid attached to lateral ethmoid; lower portions of cleithra transverse; hypocoracoids interlocking below

Loricariinae, Neoplecostominae.

Body naked; metapterygoid small, not reaching skull; cleithra running somewhat forward to their symphysis; hypocoracoids tapering forward below, not interlocking

Argiinae.

It seems to me that if the *Argiidae* are to be separated off as a distinct family, the *Plecostomidae* also should be recognized, as they differ quite as much from the *Loricariidae*.

LXVI.—*New Species of Heterocera from Costa Rica.*—XI.

By W. SCHAUS, F.Z.S.

Geometridæ.

Aplogompha argentilinea, sp. n.

♂. Palpi and frons lilacine buff; vertex, collar, and thorax dull lilacine brown; abdomen dark brown above, silvery grey below. Fore wings: the basal half to middle of costa and postmedial line on inner margin black-brown, crossed by some buff striæ, and containing a few metallic scales in cell outwardly, followed by a large triangular whitish space shaded with fuscous scales and with its apex at vein 2, its costal area shaded with buff; a postmedial dark reddish-brown line, followed by fine buff and dark brown lines, and a heavy silvery line outwardly shaded with black and not reaching costa; a dull buff-grey space beyond the silver line limited by a straight subterminal white line, beyond which

the margin is reddish brown. Hind wings: the costal margin broadly whitish grey to subterminal; the base fuscous brown, crossed by buff striae and spots; a broad grey shade beyond cell, narrowing towards but not reaching inner margin, followed by dark brown and buff; the silvery line interrupted and crossing large dark brown spots; the subterminal line silvery, outwardly shaded with dark brown between the veins; the apex dark brown.

Expanse 23 mm.

Hab. Juan Vinas.

Opisthoxia interrupta, sp. n.

♂. Palpi brown. Frons dark velvety brown, with some greyish shading below. Vertex, collar, and thorax dark silvery grey. Abdomen grey, finely irrorated with fuscous. Fore wings lilacine grey, with some darker irrorations; ocellus large, black, edged with ochreous and then brown, containing some silvery scales within it in front and some behind on the brown shading; a subterminal brown shade, outwardly edged with silver, slightly outcurved at costa, incurved and partly interrupted between 6 and 4, then straight to tornus; cilia iridescent grey or brown. Hind wings grey, the postmedial area broadly shaded with dark brown, with still darker postmedial and subterminal shades, the whole irrorated with silver; the base irrorated with dark brown; a broad fuscous shade on discocellular; the outer margin grey, with fine dark lines, and some marginal silvery spots, those between 2 and 4 larger, and edged with black points on either side.

Expanse 26 mm.

Hab. Juan Vinas, Sitio, Tuis.

The female of this species was erroneously made the female of *O. melae*, Dr., in the 'Biologia.'

Berberodes trilinea, sp. n.

♂. Palpi, head, and neck dark brown; tegulae, thorax, and abdomen silvery white, the latter with a dorsal fuscous-brown spot terminally and with long ventral tufts of creamy-white hairs; legs shaded with brown. Wings silvery white; some pale brown striae on outer and inner margins; medial and postmedial fine, pale, brown lines; a terminal dark brown line. Fore wings: a fine antemedial line; costa narrowly yellow, irrorated with golden scales, and with black spots along extreme margin. Underneath white.

Expanse 28 mm.

Hab. Juan Vinas, Tuis.

Bapta argentata, sp. n.

♂. Palpi and head brown; body white; fore legs streaked with light brown; mid and hind legs with yellowish brown. Wings white, irrorated with silvery-white scales; cilia white; minute black discal points; a fine postmedial fuscous-grey line; some subterminal black irrorations. Fore wings: the costa very finely yellowish brown; traces of an antemedial line on inner margin. Underneath white.

Expanse 34 mm.

Hab. Juan Vinas.

This is the *B. fulvicosta* of the 'Biologia,' but does not agree with Walker's type in the collection of Mr. Druce.

Bapta candida, sp. n.

♂. Palpi and head brown; body white; legs streaked with yellowish brown. Wings silvery white, the outer margin thinly irrorated with black; terminal black irrorations forming a fine line; a postmedial fuscous-grey line, with darker scales on veins; black discal points. Fore wings: a fine antemedial line not reaching costa; the costa finely yellowish brown.

Expanse 27 mm.

Hab. Juan Vinas, Poas.

Smaller than *B. argentata*, Schs., which has the termen white.

Bapta molesta, sp. n.

♂. Palpi and frons reddish brown. Body and wings white, faintly tinged with yellowish. Wings: black discal points; a postmedial and a subterminal pale brownish shade formed by dark irrorations; a terminal dark brown line. Fore wings: the costa finely yellowish brown; an outbent antemedial fuscous line from cell to middle of inner margin.

Expanse 24 mm.

Hab. Juan Vinas, Tuis.

Cyclomia disparilis, sp. n.

♂. Body and wings above purplish black. Fore wings: a fine curved black antemedial line and a similar less distinct medial line, the latter followed by a brown discocellular spot edged with black; a sinuous black postmedial line irregularly spotted with light brown; marginal buff-brown mottlings between veins 3 and 4 and from vein 5 to apex; some light brown spots on costal edge; a terminal black line

with buff-brown points at veins. Hind wings: the costa to postmedial roseate buff, widest medially, and containing a black spot; a black antemedial line on inner margin; the postmedial black, and a buff-brown line from it at vein 3 to anal angle; a marginal buff-brown spot between 3 and 4. Body and wings below yellow, irrorated and striated with purple. Fore wings: the inner margin silky grey; a broad subterminal purple band; some purple in and beyond cell. Hind wings: the subterminal purple band expanding to termen above vein 4; a fine antemedial line; the discal spot on both wings ochreous.

Expanse 19 mm.

Female purplish brown; the medial line distinct; the postmedial buff-brown, edged with dark violaceous brown; no pale space on costa of hind wings; the marginal mottlings less distinct. Underneath the markings less contrasted than in the male.

Expanse 19 mm.

Hab. Juan Vinas, Guapiles, Sixola.

Semiothisa guapilaria, sp. n.

♂. Body and wings violaceous brown, finely irrorated with whitish; the lines dark brown, shaded with ochreous brown; the postmedial line crenulate; a terminal dark brown line; cilia light brown, with fuscous spots. Fore wings faintly excavated below apex; the costa spotted with black and orange-brown; the lines starting from reddish-brown costal spots; the antemedial outcurved in cell, wavy; the medial perpendicular, finely wavy; the postmedial outwardly shaded with black between 3 and 4, and followed by a small black spot; also followed from 6 to costa by a reddish-brown shade and a white point between 6 and 7. Hind wings: a wavy medial line and a black spot on discocellular; a faint subterminal fine brown line; the outer margin angled at vein 4. Fore wings below black, mottled with orange-brown striæ, chiefly on costa and postmedially; the veins terminally orange-brown; a white spot between 6 and 7. Hind wings below fuscous grey; the veins brownish; some irregular small white spots medially and terminally.

Expanse 24 mm.

Hab. Guapiles, Carillo.

Semiothisa poasaria, sp. n.

Palpi and vertex mottled brown and white; frons light brown. Body whitish grey; a transverse dark brown line

on collar ; some dark brown irrorations on thorax and paired dorsal spots on abdomen. Wings whitish grey, thinly irrorated and striated with grey. Fore wings excised from 7-4, inwardly oblique below 4 ; the lines starting from brown costal streaks ; the antemedial outcurved, wavy, fine, ochreous brown, with some black irrorations chiefly on veins ; the medial similar, wavy, with black irrorations only on veins ; postmedial outcurved, white from vein 7-2, otherwise ochreous brown, followed from below 3 to 5 by a large dark brown spot cut by veins 3 and 4, and preceded by a similar brown narrow space interrupted between 3 and 4 ; similar smaller spots from below 6 to above 7 outwardly, and a dark line inwardly from 6-7 ; outer margin shaded with brown, with darker striæ ; a whitish shade from below 7 to apex. Hind wings : a fuscous-grey antemedial line ; a black discal point ; the postmedial fine, punctiform, especially on 3 and 4, followed by a broad dark brown shade cut by veins 3 and 4, which are whitish ; the terminal area whitish grey, with darker striæ ; the margin crenulate and deeply angled at vein 4. Underneath buff-white, with brown striæ ; the medial line and a basal line almost black, wavy, heavily marked ; the postmedial similar, shaded outwardly with ochreous brown and geminate on fore wings, the dark portion extending along costa to apex ; the white apical space as above.

Expanse 35 mm.

Hab. Volcano Poas.

Bears a superficial resemblance to *S. enotata*, Gn.

Microsemia consociata, sp. n.

♂. Palpi and frons brown ; vertex whitish ; body and wings bone-colour ; the outer space beyond postmedial line tinged with grey. Fore wings : some black irrorations on costal and outer margin ; a subbasal curved line of black irrorations ; antemedial fine, reddish brown, angled in cell, shaded inwardly with grey, and with a black point on subcostal ; a black discal point ; postmedial fine, reddish brown, from costa before apex to middle of inner margin, outwardly shaded with greyish and marked by black points, the largest on veins 6-8 ; subterminal black spots on veins 2-5, the largest on vein 3 ; terminal black points at veins. Hind wings : a black subbasal line ; a black discal point ; the postmedial reddish brown, outwardly shaded with grey, straight and without spots ; subterminal points on veins and a large black spot on inner margin ; termen as on fore wings.

Underneath white; the postmedial line heavier, black; black irrorations on outer margins and black discal points. Fore wings: subterminal spots coalescing; a broad black antemedial shade not reaching costa.

Expanse 23 mm.

Female: the black irrorations more evenly spread over wings; the points on postmedial less distinct; subterminal spots faintly indicated on vein 5; the outer margins more distinctly angled.

Expanse 26 mm.

Hab. Juan Vinas.

Closely allied to *M. attenuata*, Dogn.

Pseudapicia merana, sp. n.

♂. Palpi dark grey; frons paler grey, with fuscous irrorations; vertex, collar, thorax, and abdomen dorsally to beyond middle rust-red, terminally greyish. Body and wings underneath yellowish buff. Wings above rust-red, mottled medially with bright yellow. Fore wings: an irregular reddish-brown antemedial line preceded by grey points on veins; similar points follow the postmedial line, which is also reddish brown, incurved between 6 and 4, sinuous and in-bent below 3; subterminal fuscous and grey points. Hind wings: a postmedial irregular line; some yellow mottling at apex; the outer margins are faintly angled.

Expanse 30 mm.

Female: wings yellow, slightly striated with purplish brown. Fore wings: the base and postmedial space from line to subterminal spots purplish brown. Hind wings: the base and inner margin narrowly purplish brown; similar postmedial spots partly coalescing and containing white points on veins; a subterminal series of small purplish spots.

Expanse 36 mm.

Hab. Juan Vinas, Sitio.

The female is figured in the 'Biologia' as that sex of *Apicia mera*, Dr., but *mera* has the sexes similar.

Cimicodes purpurea, sp. n.

♂. Palpi and head fuscous, the palpi laterally streaked with olive-brown. Collar pale greenish yellow. Thorax and abdomen reddish brown, the latter fuscous grey terminally. Wings dark brown, tinged with lilacine and thinly streaked with black. Fore wings: the costal margin yellowish buff, becoming whitish below subcostal, and above it irrorated and striated with black. The lines from whitish shade along

subcostal; the antemedial slightly oblique outwardly, fine, lilacine, outwardly shaded with reddish brown; a black discal point circled with lilacine and an oblique reddish-brown medial shade from it to inner margin; the postmedial slightly incurved, fine, lilacine, inwardly edged with reddish brown, and with a whitish-buff point on submedian; a curved whitish line before apex, continuing as a subterminal reddish-brown line from just above vein 7 to vein 5, then considerably inset and oblique to tornus, followed on veins by fine whitish-buff spots. Hind wings: a reddish-brown antemedial line straight to vein 2, then slightly incurved to inner margin near angle, with buff points on veins 1 and 2; a postmedial outcurved line from vein 5 to angle and an incurved line from costa at apex to vein 5; the lines outwardly shaded with lilacine; the postmedial and subapical lines also followed by buff points on veins; the outer margin tinged with reddish brown. Underneath fuscous grey, tinged with lilacine, with numerous faint black striæ and irrorations.

Expanse 52 mm.

Female pale olive-brown; the collar and costa dark lilacine grey; the extreme costa buff, striated with black; the lines reddish brown; no medial line; the postmedial outwardly whitish and punctiform, the whitish continuing below costa and angled on costa near subterminal; the subterminal lines fainter; cilia reddish brown, tipped with lilacine.

Expanse 56 mm.

Hab. Carillo, Tuis, Sixola.

Microgonia bilinea, sp. n.

♂. Head and thorax olive-brown; abdomen greyish brown. Fore wings olive-brown, thinly striated with black; a dull brown antemedial line forming three outcurves and with white points on median and submedian; a black discal point; postmedial heavily marked, geminate, black, separated by a greyish line, the inner part of line angled at vein 7 and incurved to costa, faintly marked, the outer part to apex, which is much suffused with black; a lilacine buff shade beyond line, expanding to tornus and crossed by an irregular darker shade. Hind wings olive-brown to medial line, which is heavily marked, black, and is followed by a broad lilacine buff shade, limited by a dark greyish dentate subterminal shade; the outer margin somewhat darker than postmedial space; a large black spot postmedially below costa. Underneath lilacine buff, striated and irrorated with black; black discal points. Fore wings: the postmedial

line finer, geminate; a terminal clearer and paler shade. Hind wings: the medial line fine, black; a curved postmedial row of black points; some faint subterminal reddish-brown shadings.

Expanse 80 mm.

Hab. Juan Vinas.

Allied to *M. agliata*, Gn., and *M. umbrosa*, Schs.

Microgonia sinuosa, sp. n.

♂. Palpi, head, and collar olive-buff. Thorax olive-grey. Abdomen above olive-green. Fore wings: the costa finely olive-brown; base to middle at discocellular and below vein 4 to outer line silvery grey, heavily striated with fuscous grey, forming a broad medial shade on which the inner black line is faintly discernible; this line outangled in cell near the small black discal point, inbent, sinuous to inner margin, with whitish points on veins; outer area above vein 4 to costa and apex dull pale olive-green, with a few dark striæ; the outer line very oblique from costa, angled at vein 7 near termen, incurved, sinuous to inner margin at two-thirds from base, lilacine white, edged with reddish brown and with white points on veins; the terminal area below 4 strongly suffused with black; a large whitish-buff spot on inner margin close to postmedial and cut by submedian. Hind wings dull olive, with greyish striæ at base and fuscous striæ on outer half; a fine whitish postmedial line; subterminal whitish streaks on veins, inset on vein 4. Fore wings below olive-grey, tinged with brown towards apex and on outer margin from 2-7, crossed by darker striæ; the apex whitish; the outer line from vein 7 near termen incurved to beyond middle of inner margin, white, inwardly shaded with dark olive-brown. Hind wings below olive-grey, much paler on outer margin; the veins olive-brown; the outer line as on fore wings, perpendicular from costa to vein 3, then slightly lunular to inner margin; the termen finely and cilia dark brown, the latter tipped with white.

Expanse, ♂ 57, ♀ 65 mm.

Hab. Juan Vinas, Tuis, Sixola.

Allied to *M. sericearia*, Wlk., = *artaxa*, Dr., and *M. mexicata*, Gn.

Microgonia extranea, sp. n.

♂. Palpi dark brown. Frons brown, a white line between antennæ. Vertex, collar, and thorax reddish brown. Abdomen buff-brown. Wings brown, with a few black irrorations.

Fore wings: a fine, darker brown, antemedial, perpendicular line, marked by sulphur-yellow spots on veins, the spot on submedian larger and extending to inner margin; a round dark greyish discal spot containing a velvety-black point; a very fine darker brown outer line also marked by sulphur-yellow points, starting from a large yellowish-brown costal spot, followed by a small cluster of black scales. Hind wings: a minute black discal point; a finely lunular post-medial line, outwardly shaded with sulphur-yellow, more marked on veins. Wings below brownish grey, irrorated with black; black discal points, traces of a fine fuscous outer line, followed by a faint reddish-brown shade; the termen narrowly shaded with white; a subterminal dentate whitish line on fore wings from costa to vein 5.

Expanse 51 mm.

Female: fore wings reddish brown, shaded with violaceous in cell and with violaceous and darker reddish-brown striæ; antemedial line darker, shaded with grey and more out-curved between veins, but with the same sulphur-yellow spots; discal spot larger; the postmedial as in the male; the costal spot more suffused with reddish brown; a subterminal fuscous dentate shade; in both sexes the postmedial is followed by a brighter shade. Hind wings reddish brown, shaded with fuscous on basal half and with black striæ; a subterminal fuscous shade. Underneath absolutely similar to the male.

Expanse 49 mm.

Hab. Turrialba, Juan Vinas.

The female has a strong resemblance to *M. zarina*, Dogn.

Microgonia sixola, sp. n.

♂. Palpi black, tipped with grey. Head and front of collar black; collar otherwise, thorax, and abdomen light grey. Wings grey, with a few black irrorations. Fore wings: antemedial brownish points on median and submedian; a black discal point; a postmedial darker grey slightly lunular line, marked by fuscous points on veins, which are followed by short whitish streaks; a cluster of black scales crosses the line at vein 3; a brown costal spot before apex, mottled with lighter brown; the termen narrowly white; cilia olive-brown. Hind wings: the outer half darker grey; a black discal point; the postmedial line, termen, and cilia as on fore wings; a subterminal dentate dark grey shade near anal angle. Underneath grey, thinly

irrorated with black; black discal points. In some specimens the lines are almost obsolete, also the black scales at vein 3.

Expanse 40 mm.

Hab. Sixola, Juan Vinas, Guapiles, Tuis.

Allied to *M. cyclopeata*, Mösch., and *punctilinea*, Warr.

Microgonia singularis, sp. n.

♀. Palpi fuscous. Head dull brown. Collar and thorax fuscous brown. Abdomen above fuscous grey, underneath fuscous brown. Fore wings fuscous; the inner margin narrowly, the outer margin broadly buff-brown, with dark striæ; some buff-brown striæ beyond cell and brownish striæ on costa; the outer edge of dark space incurved below vein 4; a velvety-black discal spot; the termen shaded with fuscous from vein 3 to apex; terminal black points. Hind wings fuscous, some buff-brown shading at anal angle. Underneath fuscous; a faint darker subterminal line, marked by buff points on veins.

Without a male it is impossible to place this species correctly.

Expanse 55 mm.

Hab. Sitio, Juan Vinas.

Herbita divisa, sp. n.

♀. Palpi brown. Body and wings roseate buff. Fore wings: a fine, fuscous, curved, antemedial line, somewhat interrupted and punctiform on veins; a black discal point; postmedial line fine, black, starting from a triangular costal spot, the inner portion of which does not reach costa, slightly incurved between 6 and 5, then straight; subterminal black points on veins. Hind wings: some scattered black striæ; the postmedial straight, black, widest on inner margin; a dentate subterminal black line above anal angle. Underneath similar, the line almost obsolescent.

Expanse 48 mm.

Hab. Poas.

Allied to *H. medama*, Dr., but so different to any of the variable females of that species that I consider it distinct.

Bonatea præclara, sp. n.

♀. Palpi brown. Head, collar, and thorax rust-brown. Abdomen buff-brown. Fore wings ochreous buff, almost obliterated from base to outer line by thick coalescing rust-brown striæ; only a few striæ on outer margin and a sub-

terminal rust-brown line, wavy and interrupted, deeply dentate from vein 3 to inner margin; lines dark olive-brown, crossed by a line of lilacine white scales, and finely edged on medial side with reddish brown; the antemedial wavy; the outer line angled at vein 7 and crenulate, followed on costa by a grey and brown spot edged with whitish; a black discal point. Hind wings fuscous, tinged with rust-brown on inner margin and subterminally; a black discal point; a post-medial crenulate brown-black line, outwardly edged with grey; termen whitish buff, with some fuscous and brown striæ; cilia rust-brown from vein 6 to anal angle, whitish buff above 6. Underneath lilacine grey, with some brown irrorations; black discal points; a fine crenulate outer line, followed by a broad rust-brown shade; the termen broadly white from vein 5 to apex on fore wings and from apex to anal angle on hind wings.

Expanse 70 mm.

Hab. Tuis.

Cirsodes aggerata, sp. n.

♂. Palpi olive-brown, third joint whitish buff; frons whitish buff below, dark brown above and on vertex, with a whitish-buff shade between antennæ. Collar, thorax, and abdomen above olivaceous grey-brown. Body below and legs buff, irrorated with black. Wings above olivaceous grey-brown, with a few scattered black scales and terminal black points at veins. Fore wings: a fine brownish antemedial line, punctiform on veins; a faintly darker shade at end of cell; outer line angled below costa near apex, fine, dark reddish brown to inner margin at 5 mm. from tornus. Hind wings: a fine dark outer line, slightly thickened on veins; a faint subterminal dentate shade. Wings below whitish buff, with large violaceous irrorations; the lines replaced by broad violaceous-grey shades. Fore wings: a subterminal dentate shade and some reddish-brown mottling from vein 3 to costa and on discal spot. Hind wings: a small discal spot; subterminal fuscous and reddish-brown points.

Expanse 40 mm.

Female: collar and thorax olivaceous buff. Abdomen and wings pale buff, thickly irrorated with violaceous black; the lines fine dark brown. Underneath whiter, with grey and black irrorations; the lines fine as above. Fore wings: a brownish discal spot and a large reddish-brown shade across

outer line to costa; no subterminal markings. The apex of fore wings more produced and acute than in the male.

Expanse 46 mm.

Hab. Juan Vinas, Poas.

Sabulodes turmalis, sp. n.

♂. Body buff, the abdomen and legs thinly irrorated with black. Fore wings buff; the costal margin shaded with light brown; the extreme edge dark brown, spotted with white except medially; an indistinct broad antemedial shade, fuscous, with a brown spot on costa and inner margin; a black discal point; a reddish-brown postmedial shade from vein 6 to costa; the outer line from a white costal spot, lunular between the veins, reddish brown to vein 5, then darker, inset and geminate on vein 4, and incurved to just beyond middle of inner margin, followed by some whitish scales and a dark greyish shade; the terminal space brownish buff, with traces of a darker subterminal shade; the veins terminally and spots on cilia reddish brown. Hind wings whitish buff, with a few black irrorations; a minute discal point; a postmedial row of dark brown points on veins; cilia with pale reddish-brown spots. Underneath buff-white, with scattered black irrorations; black-brown discal spots and postmedial similar spots on veins, connected on fore wings by a brown shade from vein 3 to costa.

Expanse 35 mm.

Hab. Poas, Volcano Turrialba.

Sabulodes planaria, sp. n.

♂. Palpi and frons violaceous brown. Vertex, body above, and wings brown. Fore wings: antemedial grey points on veins; a minute black discal point; outer line fine, dark reddish brown, from costa near apex to inner margin at two-thirds from base, followed by black points on veins, outwardly edged with white, and some whitish irrorations from vein 3 to inner margin; cilia reddish brown. Hind wings: a straight postmedial fuscous line outwardly shaded with fuscous and followed by points as on fore wings. Body below buff; legs outwardly fuscous grey. Wings below: from base to beyond middle yellowish buff, with fuscous irrorations; black discal points; a broad subterminal brown shade, not reaching inner margin; the apex of fore wings and outer margin narrowly, but broadly on hind wings, whitish; base of cilia whitish, with fuscous spots, terminally reddish brown.

Expanse 40 mm.

Hab. Juan Vinas.

Sabulodes infida, sp. n.

♂. Palpi buff, shaded with brown laterally. Body buff, the thorax tinged with brown, the abdomen irrorated with black. Fore wings buff, shaded and irrorated with brown; an antemedial brown shade, angled below costa, then inwardly oblique; a black discal point; a wavy postmedial brown line, inwardly oblique from costa, followed by a geminate grey-brown line from apex to inner margin, with fuscous points and whitish dashes on veins; a clearer buff shade on inner margin beyond geminate line and an irregular and indistinct subterminal buff shade. Hind wings similar, a fine medial line and black discal point; a geminate postmedial brown line and a subterminal buff shade. Underneath whitish buff; black discal points; a fine postmedial punctiform line; the outer margins thickly irrorated with brown and black, especially towards apex of fore wings.

Expanse 32 mm.

Female more of a whitish buff; antemedial line fuscous brown, with a projecting line on submedian fold to postmedial line; the postmedial more heavily marked than in the male, rust-brown; the buff shade beyond postmedial much broader and almost reaching apex. The hind wings have the buff and brown more contrasted than in the male.

Expanse 39 mm.

Hab. Juan Vinas, Tuis.

Sabulodes nubifera, sp. n.

♂. Palpi buff, laterally dark brown. Head buff; collar, thorax, and abdomen buff-brown, with a few black irrorations on patagia and abdomen. Fore wings: the base buff, with a few brown specks, limited by the antemedial, which consists of fuscous points on subcostal, median, and submedian; medial space brownish, shaded with buff on costa and crossed by a fuscous medial shade with a white point on discocellular; a postmedial row of black points on veins somewhat incurved, followed by a broad buff shade, expanding to outer margin below apex; the costa at apex and outer margin below vein 4 brownish. Hind wings buff, irrorated with black; a brownish medial shade; a postmedial straight row of black points; the outer margin broadly brown. Underneath roseate buff, thickly irrorated with brown; a faint medial shade; black discal points and postmedial black points. In some specimens the brown spaces and medial lines have a reddish tinge.

Expanse 47 mm.

Hab. Juan Vinas, Tuis.

Sabulodes exsecrata, sp. n.

♀. Body and wings brownish buff, with scattered black and brown irrorations; small black discal points; an outer row of black and reddish-brown points on veins, connected by a fine faint brownish shade; a subterminal pale reddish-brown shade; the termen shaded with light brown. Fore wings: an indistinct brownish antemedial shade, outangled in cell, outcurved below it; a faint reddish-brown shade beyond cell, incurved at vein 3; the outer line from costa at 4 mm. from apex, faintly outcurved from 5 to 3, then narrow to inner margin. Hind wings more heavily irrorated with black; black discal points. Fore wings: an outer row of black points, straight from costa to vein 3, then incurved, followed from 3 to costa by a broad reddish-brown shade; the apex whitish. Hind wings: the outer row of points slightly curved.

Expanse 35 mm.

Hab. Poas.

Sabulodes? lineata, sp. n.

♂. Antennæ serrate fasciculate. Palpi light brown; frons greyish; vertex and body brownish buff, a fuscous shade on neck, and some darker brown transverse shades on abdomen. Wings buff, shaded with pale rust-brown. Fore wings: costa lilacine fuscous, darkest on basal third; an antemedial line, black on costa, angled on subcostal, where there is a small cluster of black scales, then inbent, pale rust-brown and indistinct, preceded by a few black irrorations; a black point at end of cell; the postmedial pale rust-brown, curved below costa and oblique to before middle of inner margin, followed by a geminate sinuous dark line, indistinctly filled in with whitish and with white points on veins, terminating in a fuscous shade at apex; outer margin brown except a buff space on inner margin next to geminate line; a wavy dark brown subterminal line; the termen rather broadly fuscous; terminal black points; cilia brown. Hind wings: a fuscous shade at base; an antemedial rust-brown line; a black discal point; a postmedial rust-brown line, fuscous on costa, followed by a fine whitish-buff dentate shade, and then a greyish-brown line; a subterminal rust-brown line, also fuscous on costa; termen and cilia as on fore wings. Underneath whitish buff; discal and terminal black points. Fore wings: a black band along outer margin,

narrowing at apex, which is whitish. Hind wings: a narrower marginal black band not reaching termen.

Expanse 28 mm.

Hab. Juan Vinas.

Periclina cervinoides, sp. n.

♂. Palpi brown; body buff-brown. Wings buff, thickly striated with light brown. Fore wings: the costa yellowish buff; a fine and indistinct antemedial line, slightly angled on median, and marked by fuscous points on veins; the outer line fine dark brown, with darker points on veins, followed by white streaks and irrorations on veins, from costa before apex to inner margin beyond middle; cilia reddish brown; a fine dark streak on discocellular. Hind wings: a dark line across wing just beyond cell, faintly shaded outwardly with lilacine white. Underneath brownish buff; some black irrorations on outer margin; a fine fuscous line across both wings, followed on fore wings by black points from vein 4 to costa.

Expanse 35 mm.

Hab. Juan Vinas.

Periclina cervina, Warr., ♀, probably belongs to this species.

Isochromodes sheila, sp. n.

♂. Antennæ fasciculate. Palpi dark grey, fringed with whitish in front. Body and wings lilacine grey, thinly irrorated with fuscous except on thorax; abdomen with paired dorsal black spots. Fore wings: a finely dentate antemedial and postmedial line, grey-brown, very indistinct, marked by fuscous points on veins, the postmedial terminating below submedian in a black line; a minute black discal point; larger subterminal black points on veins, almost obsolete on vein 4; fuscous points on cilia at veins. Hind wings: very faint traces of medial and postmedial brownish lines, the latter punctiform on veins, outwardly pale shaded; subterminal black points on veins 2, 3, and discal fold; a black discal point. Underneath white, irrorated with fuscous brown except on inner margin of fore wings, the irrorations forming heavier subterminal shades; a crenulate terminal fuscous-brown line.

Expanse 31 mm.

Female: a wavy indistinct medial shade just beyond discal point, suffusing with postmedial at vein 2 and submedian; the lines without dark points; subterminal spots smaller; the discal spot on hind wings ochreous, edged with black.

Underneath the dark subterminal shades form distinct bands, on fore wings from costa well before apex to tornus, on hind wings from apex to anal angle; no dorsal spots on abdomen.

Expanse 30-35 mm.

Hab. Juan Vinas, Sitio, Tuis.

Isochromodes phyllira, sp. n.

♂. Palpi white, streaked with black laterally. Frons white below, black above. Vertex and body ochreous buff; paired dorsal black spots on abdomen. Wings ochreous buff, irrorated with black; black discal, postmedial, subterminal, and terminal spots. Fore wings: antemedial black spots on veins, connected by a fine brownish shade, these and the postmedial spots shaded with whitish; a wavy light brownish line from costa, contiguous to cell-spot and meeting postmedial spots on inner margin; a black point at base of submedian; postmedial spots incurved below vein 3. Hind wings: the postmedial spot outset on veins 3 and 4. Underneath luteous, with only a few black irrorations, chiefly on costa and outer margins; black discal points; the terminal points larger. Fore wings: a dentate lunular fuscous line connecting the postmedial spots. Hind wings: a fuscous subterminal line, very irregular.

Expanse 34 mm.

Hab. Juan Vinas.

Isochromodes chiron, sp. n.

♂. Palpi fuscous grey, fringed with buff. Frons dark brown. Vertex and body buff-brown; dorsal black irrorations and paired spots on abdomen; underneath luteous; tibiæ and tarsi streaked with fuscous grey. Wings buff-brown, irrorated with black; outer, subterminal, and terminal black points on veins; black discal points. Fore wings: the costa streaked with fuscous grey; a finely dentate brown antemedial line, punctiform on veins; a fine brownish indistinct line from costa just beyond discal point, suffusing with outer row of spots at vein 2; the submedian outer spot suffusing with irrorations on inner margin. Wings underneath whitish buff, partly irrorated with fuscous striæ; an outer fuscous line angled between veins 3 and 4, and followed from 3 to costa by fuscous shades, reaching termen on hind wings; black discal points; a terminal black line, crenulate on hind wings.

Expanse 33 mm.

Hab. Juan Vinas.

Tetracis picturata, sp. n.

♀. Palpi buff-brown, tipped with black. Body and wings buff-grey, thinly irrorated with black. Fore wings: the base faintly tinged with roseate, limited by the antemedial dark brown line, which is angled on subcostal, slightly inbent in cell, outangled on median and inangled on fold, then outcurved; a black discal point; postmedial reddish brown on costa at 4 mm. from apex, downcurved, angled at 7, then black and nearly straight to inner margin, followed by a rust-brown shade having its outer edge dentate crenulate; a black shade at apex; an oblique fuscous shade from vein 4 to termen below 2; cilia rust-brown; the margin produced at vein 4 beyond apex and slightly crenulate; a black discal point. Hind wings: a black postmedial line, followed by a rust-brown shade less distinct. Underneath whitish buff, with brownish striæ and black irrorations; the postmedial line very fine, dark brown and punctiform on veins.

Expanse 38 mm.

Hab. Juan Vinas.

Azelina solitaria, sp. n.

♀. Body and wings light reddish brown; a buff streak between antennæ. Fore wings: antemedial line fine, fuscous brown, inwardly faintly tinged with lilacine, oblique and outcurved to median, again outcurved to submedian, and less so on inner margin; a fuscous discal point; postmedial straight, slightly oblique, inwardly roseate buff from costa at three-fourths from base to inner margin beyond middle; outer margin tinged with lilacine, with oblique reddish-brown shades from near postmedial to termen; some terminal black and white spots; the margin deeply excised below apex and vein 6 and produced at vein 3 in a line with apex. Hind wings: a fine buff postmedial line faintly sinuous; the costa luteous. Underneath the postmedial line is white; black discal points; the inner margin of fore wings broadly whitish.

Expanse 45 mm.

Hab. Banana River, Sixola.

Therina modica, sp. n.

♂. Palpi ochreous brown. Head, thorax, abdomen, and wings ochreous brown; collar and patagia in front yellowish. Wings with indistinct darker striæ. Fore wings: a fine antemedial perpendicular brown line inwardly edged with

yellow; the postmedial line similar but outwardly edged with yellow, slightly oblique inwardly from costa at 4 mm. from apex; a dark shade on discocellular. Hind wings: a single medial line outwardly edged with yellow. Underneath brownish buff with a few darker striæ; a black postmedial point on costa of fore wings.

Expanse 29 mm.

Female: the outer margins at vein 4 more distinctly angled than in the male; body and wings darker and browner; the lines heavier, yellow; the veins finely yellowish.

Expanse 33 mm.

Hab. Juan Vinas, Sitio.

Therina coalitaria, sp. n.

♂. Palpi black; head orange; tegulæ black fringed with orange; thorax fuscous grey; abdomen whitish, tinged with yellow at base and crossed by fuscous-grey lines. Wings white spotted with dull olive-brown, partly coalescing. Fore wings: a dull olive-brown antemedial line angled in cell, coalescing with some of the spots; a small black spot at end of cell; an outer dark line faintly wavy, inwardly oblique from costa before apex, crossing a large dark blotch between 3 and 5, and followed by a large spot between 2 and submedian; cilia with large black spots. Hind wings: a dark medial line; traces of a curved postmedial line. Underneath similar.

Expanse 35 mm.

Hab. Poas, Juan Vinas.

Ænoptila laudata, sp. n.

♀. Palpi and frons dark reddish brown. Vertex, collar, and thorax dull greyish; a black transverse shade on thorax. Abdomen above reddish brown shaded with black terminally, and with fine grey segmental lines. Fore wings pale olive-brown; the costal margin broadly black shaded in front with buff, and reddish brown beyond middle; a narrow dark maroon shade behind black margin from base to postmedial; antemedial line perpendicular, wavy, fine, dark maroon inwardly edged with whitish from median, somewhat punctiform on median and submedian; a postmedial broad black line, somewhat edged with maroon, straight and inwardly oblique, followed by a large white spot from vein 4 to near 7, irrorated with yellow, and outwardly cut by a maroon line; a fine outcurved lunular line from this spot to inner margin; the termen faintly tinged with red. Hind wings: costal

half strongly tinged with vermilion; inner half pale olive-brown; the postmedial line of fore wings continued to middle of inner margin, and followed by a fine maroon line, outwardly edged with buff, less heavily marked below vein 4, and outbent, deeply wavy. Underneath silky roseate buff; some black irrorations on costa of fore wings, and a small black apical spot.

Expanse 32 mm.

Hab. Juan Vinas.

Thysanopyga submarginata, sp. n.

♀. Body brown; a greyish spot on vertex; the abdomen shaded with dull grey on posterior half. Wings brown faintly tinged with lilacine, and thinly striated with black; the lines black-brown. Fore wings: the costa fuscous mottled with buff; a black subcostal line from base to apex; a very fine basal line; antemedial line straight or faintly oblique inwardly from subcostal; the postmedial line faintly incurved from subcostal to inner margin near base; a black point in cell; a subapical white lunule followed at termen by fuscous and brown shadings; a terminal dark line with whitish points at veins; cilia brown with a fine buff line at base. Hind wings: the antemedial line distinct, straight; a white discal point; the postmedial line very fine from costa near apex to anal angle. Underneath grey with fuscous-grey irrorations; the outer margins very broadly dark brown; a terminal white spot on fore wings from below vein 6 to vein 8; a black point at apex. The sexes similar.

Expanse 32 mm.

Hab. Juan Vinas, Sixola.

Allied to *T. subapicalis*, Dogn., which is larger and has no outer line on hind wings.

Thysanopyga muricolor, sp. n.

♂. Palpi and frons brown; vertex and body mouse-grey; lateral tufts at base of abdomen fuscous. Wings mouse-grey. Fore wings: the costa with black striæ; an antemedial reddish-brown line angled in cell, curved below median; the basal space in and below cell reddish brown; a fine medial line from subcostal above black discal point, inbent to median, then straight to inner margin, reddish buff, indistinctly edged with reddish brown; an outer reddish-brown incurved line, outwardly shaded with brown and some black at vein 2 and submedian fold; the terminal space

brownish grey; a subapical curved black line enclosing a light grey space above vein 6 and a brown dash on costa. Hind wings: a basal, postmedial, and subterminal fuscous shade; some fine black striæ on inner margin; a minute whitish discal point; a terminal brown line; cilia at base and terminally greyish. Underneath dull grey; black discal points; a few scattered black irrorations; a faint subterminal brownish shade on costa of fore wings and an apical black point.

Female: grey portion of wings rather lighter, the outer margin somewhat darker brown; the hind wings faintly tinged with brown.

Expanse 29 mm.

Hab. Juan Vinas.

Thysanopyga fuscaria, sp. n.

♂. Palpi and frons brown; vertex grey; head behind buff-brown, collar and thorax violaceous brown, the patagia greyish; abdomen brown grey. Fore wings: costal margin, a spot below apex on outer margin, and a marginal space from vein 5 to tornus whitish buff with dark grey striæ, otherwise fuscous grey; antemedial line reddish brown, fine, angled on subcostal, inbent on median, and then straight to submedian, inwardly edged with whitish buff; a black medial line from subcostal to inner margin; a white discal point; the outer line reddish brown, incurved, outwardly shaded with whitish buff from below vein 5. Hind wings: buff, shaded with ochreous, and with long dark grey striæ; an indistinct fuscous-brown antemedial line; a white discal point followed by a broad fuscous shade; an indistinct subterminal shade, very irregular. Underneath grey thickly irrorated with fuscous.

Expanse 27 mm.

Hab. Sitio, Juan Vinas.

Closely allied to *T. muricolor*, Schs.

Petelia vinasaria, sp. n.

♂. Palpi and legs lilacine buff. Head and thorax purplish brown; abdomen greyish shaded dorsally with violaceous red. Wings purplish brown striated with fuscous; black discal points; a fine fuscous antemedial line; the outer line fine, fuscous, faintly lunular. Underneath pale buff, the outer margins broadly shaded with purplish red; black discal points.

Expanse 24 mm.

Female : a faint reddish-brown shade on fore wings beyond cell, and a similar shade on hind wings between the lines.

Expanse 28 mm.

Hab. Juan Vinas.

Petelia pallidula, sp. n.

♂. Palpi and frons purplish brown. Vertex and body pale reddish brown. Wings light brown : an outer row of whitish points on veins, inwardly dark shaded. Fore wings : antemedial whitish points on veins ; a reddish shade at end of cell and beyond it ; a small similar shade below vein 2 medially, followed by a purplish shade which extends to costal and inner margins ; a black discal point ; some darker striæ on margins. Hind wings : the cell crossed by purplish striæ ; a small reddish shade beyond cell between 4 and 6. Fore wings below roseate buff ; a black streak on discocellular ; some dark striæ on costa. Hind wings below yellowish ; the outer margin broadly roseate.

Expanse 30 mm.

Female : wings yellowish brown ; the outer row of spots larger, black, those on veins 3 and 4 somewhat outset. Fore wings : antemedial spots faintly connected by a fuscous line ; the purplish shade across end of cell very faint ; the shades beyond cell pale ochreous. Wings below roseate ; a faint darker subterminal shade.

Expanse 32 mm.

Hab. Poas.

Allied to *P. interrupta*, Warr.

Petelia nigrivestita, sp. n.

♂. Palpi light brown tipped with grey. Frons purplish brown. Body light brown ; a large black patch on thorax posteriorly extending on abdomen ; transverse black bands on most of the segments. Wings light brown with a few darker striæ and black irrorations. Fore wings : an interrupted faint purplish antemedial line ; a large fuscous patch at and beyond end of cell, not reaching outer margin, its outer edge dentate and followed by a black spot at apex, and a fuscous shade between 3 and 4 ; some outer white points on veins 3-7 ; a purplish postmedial shade from vein 3 to inner margin, preceded below vein 2 by a faint pale reddish shade. Hind wings : a faint postmedial line, heavily marked, black, from vein 4 to inner margin and followed by a large black patch, with its outer edge dentate. Underneath roseate buff with minute black discal points.

Expanse 28 mm.

Female: brighter tinged with salmon-colour; the black striæ conspicuous; the large spots black, very distinct. Fore wings: antemedial line angled below costa, inbent and interrupted between the veins; no terminal fuscous shade at vein 4.

Expanse 34 mm.

Hab. Poas, Juan Vinas.

Closely allied to *P. nigriplaga*, Schs., but of a different colour and the large patches more remote from margin.

Petelia umbrosa, Schs.

♀. Palpi, head, and collar purplish. Thorax and abdomen reddish. Wings reddish thickly striated with purplish. Fore wings: costa purplish; broad antemedial, medial, and postmedial purplish shades, the last two faintly oblique outwardly and angled at vein 3. Hind wings; an antemedial and a postmedial broad purplish shade, suffusing vaguely above vein 6 and below vein 4. Underneath yellowish buff; black discal points; a fine fuscous outer line, angled on both wings at vein 4; some faint purplish striæ.

Expanse 28 mm.

Hab. Juan Vinas.

Petelia cariblanca, sp. n.

♂. Palpi pale reddish brown. Head, body above, and wings purplish red; a black spot on frons; neck whitish buff, similar segmental lines on abdomen. Wings: black discal points followed by a nearly quadrate yellow spot edged with brighter red; an outer row of whitish points on veins. Fore wings: antemedial white points on veins; a small medial yellow spot on fold edged with red, and a faint similar spot in cell before discal spot. Fore wings below pale reddish; a black discal spot and traces of a yellow spot. Hind wings below pale yellowish; a reddish discal spot; the outer margin broadly reddish.

Expanse 34 mm.

Hab. Cariblanco.

Enothalia montivaga, sp. n.

♀. Palpi and frons brown, the vertex darker; collar fuscous grey; thorax and abdomen reddish brown. Wings rich brown. Fore wings: the costal margin purplish fuscous; a purplish-brown antemedial line straight from subcostal to

inner margin; a similar medial shade faintly outcurved, crossing the black discal point; an outer series of white points, the largest on costa connected by a faint darker brown line partly irrorated with white, and outcurved on veins 3 and 4; terminal white points on veins. Hind wings: an antemedial purplish-brown line, straight from costa to below cell, then inbent to inner margin; an outer row of white points also outcurved on 3 and 4, and terminal points as on fore wings. Fore wings below roseate brown; a dark outer line angled below vein 4; a small discal point. Hind wings below yellowish irrorated with purple on outer margin; a large discal point; an outer violaceous line, broader than on fore wings, and angled below vein 4.

Expanse 31 mm.

Hab. Poas.

Allied to *Enothalia anagogaria*, Warr.

Alana picturata, sp. n.

♂. Palpi and frons brown; antennæ and vertex grey; back of head and collar lilacine brown; thorax grey; abdomen grey shaded with brown dorsally. Fore wings grey, thinly striated with fuscous; a heavy reddish-brown antemedial line, angled below subcostal; a faint medial brownish shade, followed by a triangular reddish-brown spot, its apex extending on vein 5; a buff shade follows this spot towards apex and is crossed by a reddish-brown postmedial line, only faintly visible below vein 5; a subterminal black line from vein 5 to costa, preceded by a reddish-brown shade; a faint terminal dark line. Hind wings light reddish brown tinged with grey at base and with a few greyish striæ; a dark brown antemedial line, an ochreous discal point, a reddish-brown medial line, and a faint subterminal line. Underneath whitish grey; a broad marginal fuscous shade. The sexes similar.

Expanse 24 mm.

Hab. Sixola, Esperanza.

Melanolophia conspicua, sp. n.

♂. Palpi buff shaded with brown laterally; vertex whitish buff; thorax, abdomen, and wings buff faintly tinged with green; abdomen with brownish dorsal spots and transverse shades. Fore wings: the margins with fuscous striæ; a fine dark antemedial line followed by a dark point on median vein; a broad fuscous medial line, somewhat sinuous and inbent; the postmedial fuscous, finely lunular, forming

a single larger lunule between vein 2 and submedian; a heavy fuscous shade on vein 4 from postmedial to subterminal; the subterminal consisting of coalescing black spots, somewhat interrupted between 2 and 4; a marginal black spot above vein 5 sometimes coalescing with subterminal; an interrupted terminal black line. Hind wings: the medial black shade heavily marked; the postmedial line very fine, irregular; subterminal black spots chiefly near inner margin and between 4 and 6; a terminal wavy black line, punctiform near anal angle. Underneath whitish buff, the lines indistinct; black discal points; a broad subterminal fuscous shade reaching termen between 4 and 7 on fore wings, narrowing and interrupted near anal angle on hind wings.

Expanse 35 mm.

Hab. Juan Vinas, Tuis.

Melanolophia directilinea, sp. n.

♂. Palpi and frons dark brown; vertex yellow. Legs buff, tarsi brown-grey. Thorax and abdomen grey. Wings buff-grey irrorated with brown; the lines dark brown. Fore wings: antemedial line curved on costa, then slightly oblique inwardly; median line straight, followed by a dark point on discocellular; postmedial line straight, faintly oblique; traces of subterminal dark shades between veins 5 and 7, more noticeable in the female. Hind wings: antemedial and postmedial lines straight from costa to inner margin; the ground-colour a trifle paler before postmedial; a terminal fine dark line on both wings. Underneath paler, the lines less distinct; a fuscous subterminal shade on female.

Expanse 41 mm.

Hab. Juan Vinas, Tuis, Carillo.

Close to *M. ordinata*, Dogn.

Cidariophanes luculenta, sp. n.

♂. Palpi mottled lilacine brown and buff, spotted with fuscous. Head and collar green, the frons spotted with black, and black shadings on collar outwardly. Thorax mottled black, brown, and green. Abdomen fuscous brown above with brighter brown dorsal tufts. Legs roseate brown spotted with black. Fore wings: basal half dark brown crossed by black striæ and a wavy black medial line; an antemedial pale green fascia, finely edged with black, outwardly oblique from costa; and angled on fold, its inner edge

expanding basally on subcostal; costa with roseate brown striæ; a green spot above discocellular inwardly, and some green before a large fuscous subterminal spot; postmedial space roseate buff crossed by black striæ, and a black spot on discocellular, followed by a green shade between 2 and 4; broad marginal fuscous shadings crossed by black striæ, somewhat interrupted on vein 4; the termen green, with large black spots between the veins; an upright subterminal whitish streak near the tornus. Hind wings fuscous; a large orange apical space to middle of outer margin; the inner area crossed by a postmedial and subterminal black wavy line; the termen on anal half narrowly roseate buff. Fore wings below: the basal and apical area roseate buff, with dark irrorations; an oblique medial black fascia, followed by a broad yellow space to tornus; a broad oblique black space from beyond cell to outer margin at vein 2. Hind wings reddish buff irrorated with black.

Expanse 45 mm.

Female: fore wings lilacine brown, with darker striæ and black irrorations; the medial black line outangled in posterior portion of cell, inwardly angled on fold; a fine black post-medial line, oblique, wavy, strongly angled on vein 4, followed by a dull greenish shade; markings otherwise similar to male, but paler. Hind wings also with a medial black line and with the lines partly repeated on underside.

Expanse 48 mm.

Hab. Juan Vinas, Cartago.

Bombycodes circumdata, sp. n.

♂. Palpi, head, collar, and coxæ yellow. Thorax and abdomen above silky grey, underneath whitish; legs outwardly dark grey. Wings white, the veins more heavily scaled; all the margins broadly dark grey.

Expanse 40 mm.

The female has vein 7 on hind wings distinctly dark grey.

Expanse 49 mm.

Hab. Juan Vinas, Tuis.

Allied to *B. orates*, Dr.

Genussa vicina, sp. n.

♂. Head fuscous; palpi fringed with orange. Collar white shaded with dark grey. Thorax white medially, dark grey laterally; the patagia almost entirely dark grey. Abdomen dark grey, whitish dorsally on basal half; a lateral

white line; white underneath. Wings white; the margins fuscous grey, darkest on veins. Fore wings: a rather broad fuscous-grey band from costa across discocellular to tornus; veins fuscous grey except on large postmedial white area. Hind wings white suffused with fuscous brown between veins 2 and 4, though streaked with white near outer margin; the veins fuscous grey.

Expanse 39 mm.

Hab. Sixola, Juan Vinas.

Near *G. semiplecta*, Warr., but the transverse band on fore wings differently placed.

LXVII.—Notes on *Fossorial Hymenoptera*.—V.

By ROWLAND E. TURNER, F.Z.S., F.E.S.

Further Notes on the Thynnidæ and Scoliidæ.

WHERE not otherwise mentioned, the types of the species described here are in the British Museum, several having been received from the African Entomological Research Commission. In more than one case I have been obliged to speak rather severely of the work of Mr. Cameron; I regret to do so, but as he is still publishing I consider it necessary. But in describing species of *Scolia*, especially *Dielis*, from the male sex he is by no means alone: this should never be attempted except from a large series and by comparison of the genitalia, which usually show good specific distinctions; colour is not usually reliable, and even when constant locally may be different in another locality without corresponding differences in the female. Descriptions of new species in this genus when taken from the male alone are seldom anything but a hindrance to other workers. Cameron, in speaking of the African species of *Plesia* in Sjöstedt's 'Zool. Kilimandjaro-Meru Expedition,' states that they are much in need of revision. He is quite right, but it is largely his own work on the group that renders such a revision difficult or almost impossible for other workers.

Family Thynnidæ.

Subfamily RHAGIGASTERINÆ.

Rhagigaster latisulcatus, sp. n.

♀. Nigra, nitida, sparse punctata; capite subquadrato, sulco lato,